

# Clearing the Air: How Environmental Air Regulations Will Impact CCP Quality, Marketing, and Cost

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## ABSTRACT

Mounting environmental regulations which impact coal-fired generation will spur utilities to explore installation of additional pollution control technologies as an alternative means of compliance.

Installation of pollution control equipment in response to these environmental air regulations will have profound implications for the production, quality, utilization, and cost of CCPs. Some examples include:

- Either fuel switching or installation of “scrubbers” can achieve compliance with SO<sub>2</sub> reduction within Phase II of CAAA90 and PM<sub>2.5</sub>. The impact of fuel switching from higher sulfur, non-compliance coal to lower sulfur, compliance coal is to reduce CCP production, improve quality, and enhance utilization in some markets. However, installation of scrubbers for both SO<sub>2</sub> reduction and PM<sub>2.5</sub> compliance increases CCP production, changes the chemical composition of the CCP, and markedly changes available markets for the product.
- Compliance with NO<sub>x</sub> reduction requirements within Phase II of CAAA90 oftentimes increases loss on ignition, and consequently increases CCP production, diminishes quality, and reduces marketability.

Each set of utility responses consequently affects the amount, type, quality, and cost of CCPs produced and managed. This paper will outline the current state of CCP production, including a breakdown of CCP types, qualities, and utilization rates. It will also provide detail on the status of environmental regulations that could potentially affect CCP production and quality, including the extent and timing of the regulations. Finally it will explore utilities’ potential responses to these environmental regulations, and impacts on future CCP quantity, quality, utilization, and costs.